

CELLULAR PHYSIOLOGY WORKSTATIONS FOR AUTOMATED DATA
ACQUISITION AND PERFUSION CONTROL

Abstract of the Disclosure

Cellular physiology workstations for automated data
5 acquisition and perfusion control are described. The
cellular physiology workstation may be used for
physiological and electrophysiological experiments. Methods
for employing such cellular physiology workstations in
physiological and electrophysiological experiments are also
10 disclosed. The cellular physiology workstations comprise
one or more recording chambers each for holding one or more
cells to be measured. One or more cells are place in each
recording chamber. Perfusions means, such as an automatic
perfusion system is connected to the recording chamber to
15 perfuse the cells with a plurality of solutions containing
different concentration of one or more agents to be tested.
Biosensors, such as patch clamps, electrodes, or microscopes
are positioned to detect a response from the cell. The
cellular physiology workstation may optionally comprise
20 injecting means for introducing an injection solution into
the cell before and during analysis.